

Release notes for ENDF/B Development n-094_Pu.241
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=9443, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 446 TO 518
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=9443, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=451
MOD = 1 OUT OF RANGE 0 - 0 RECORD NUMBER 446
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 1, MT=452 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=452
SECTION 1/452 NOT IN DIRECTORY RECORD NUMBER 519
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 1, MT=455 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=455
SECTION 1/455 NOT IN DIRECTORY RECORD NUMBER 525
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 1, MT=456 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=456
SECTION 1/456 NOT IN DIRECTORY RECORD NUMBER 533
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 1, MT=458 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF= 1, MT=458
SECTION 1/458 NOT IN DIRECTORY RECORD NUMBER 539
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 546
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 1 (0): Directory (b)

- | | | |
|--|---------------|-----|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 1 | RECORD NUMBER | 957 |
| SECTION 3/ 1 NOT IN DIRECTORY | | |
8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 2 (0): Directory (b)
- | | | |
|--|---------------|-----|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 2 | RECORD NUMBER | 997 |
| SECTION 3/ 2 NOT IN DIRECTORY | | |
9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 4 (0): Directory (b)
- | | | |
|--|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 4 | RECORD NUMBER | 1037 |
| SECTION 3/ 4 NOT IN DIRECTORY | | |
10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 16 | RECORD NUMBER | 1075 |
| SECTION 3/ 16 NOT IN DIRECTORY | | |
11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 17 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 17 | RECORD NUMBER | 1093 |
| SECTION 3/ 17 NOT IN DIRECTORY | | |
12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 18 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 18 | RECORD NUMBER | 1102 |
| SECTION 3/ 18 NOT IN DIRECTORY | | |
13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 51 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 51 | RECORD NUMBER | 1142 |
| SECTION 3/ 51 NOT IN DIRECTORY | | |
14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 52 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 52 | RECORD NUMBER | 1164 |
| SECTION 3/ 52 NOT IN DIRECTORY | | |
15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 53 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 53 | RECORD NUMBER | 1183 |
| SECTION 3/ 53 NOT IN DIRECTORY | | |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 54 | RECORD NUMBER | 1201 |
| SECTION 3/ 54 NOT IN DIRECTORY | | |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 55 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 55 | RECORD NUMBER | 1218 |
| SECTION 3/ 55 NOT IN DIRECTORY | | |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 56 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 56 | RECORD NUMBER | 1235 |
| SECTION 3/ 56 NOT IN DIRECTORY | | |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 57 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 57 | RECORD NUMBER | 1251 |
| SECTION 3/ 57 NOT IN DIRECTORY | | |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 58 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 58 | RECORD NUMBER | 1267 |
| SECTION 3/ 58 NOT IN DIRECTORY | | |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 59 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 59 | RECORD NUMBER | 1282 |
| SECTION 3/ 59 NOT IN DIRECTORY | | |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 60 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 60 | RECORD NUMBER | 1297 |
| SECTION 3/ 60 NOT IN DIRECTORY | | |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 61 (0): Directory (b)

- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 61 | |
| | SECTION 3/ 61 NOT IN DIRECTORY | RECORD NUMBER 1311 |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 62 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 62 | |
| | SECTION 3/ 62 NOT IN DIRECTORY | RECORD NUMBER 1324 |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 63 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 63 | |
| | SECTION 3/ 63 NOT IN DIRECTORY | RECORD NUMBER 1336 |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 64 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 64 | |
| | SECTION 3/ 64 NOT IN DIRECTORY | RECORD NUMBER 1348 |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 65 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 65 | |
| | SECTION 3/ 65 NOT IN DIRECTORY | RECORD NUMBER 1359 |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT= 91 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT= 91 | |
| | SECTION 3/ 91 NOT IN DIRECTORY | RECORD NUMBER 1370 |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 3, MT=102 (0): Directory (b)
- | | | |
|--|---|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 3, MT=102 | |
| | SECTION 3/102 NOT IN DIRECTORY | RECORD NUMBER 1397 |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 2 (0): Directory (b)
- | | | |
|--|--|--------------------|
| | ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 2 | |
| | SECTION 4/ 2 NOT IN DIRECTORY | RECORD NUMBER 1438 |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 16 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 16 | RECORD NUMBER | 1572 |
| SECTION 4/ 16 NOT IN DIRECTORY | | |
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 17 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 17 | RECORD NUMBER | 1583 |
| SECTION 4/ 17 NOT IN DIRECTORY | | |
33. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 18 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 18 | RECORD NUMBER | 1594 |
| SECTION 4/ 18 NOT IN DIRECTORY | | |
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 51 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 51 | RECORD NUMBER | 1605 |
| SECTION 4/ 51 NOT IN DIRECTORY | | |
35. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 52 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 52 | RECORD NUMBER | 1616 |
| SECTION 4/ 52 NOT IN DIRECTORY | | |
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 53 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 53 | RECORD NUMBER | 1627 |
| SECTION 4/ 53 NOT IN DIRECTORY | | |
37. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 54 | RECORD NUMBER | 1638 |
| SECTION 4/ 54 NOT IN DIRECTORY | | |
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 55 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 55 | RECORD NUMBER | 1649 |
| SECTION 4/ 55 NOT IN DIRECTORY | | |
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 56 (0): Directory (b)

- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 56 | RECORD NUMBER | 1660 |
| SECTION 4/ 56 NOT IN DIRECTORY | | |
40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 57 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 57 | RECORD NUMBER | 1671 |
| SECTION 4/ 57 NOT IN DIRECTORY | | |
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 58 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 58 | RECORD NUMBER | 1682 |
| SECTION 4/ 58 NOT IN DIRECTORY | | |
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 59 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 59 | RECORD NUMBER | 1693 |
| SECTION 4/ 59 NOT IN DIRECTORY | | |
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 60 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 60 | RECORD NUMBER | 1704 |
| SECTION 4/ 60 NOT IN DIRECTORY | | |
44. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 61 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 61 | RECORD NUMBER | 1715 |
| SECTION 4/ 61 NOT IN DIRECTORY | | |
45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 62 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 62 | RECORD NUMBER | 1726 |
| SECTION 4/ 62 NOT IN DIRECTORY | | |
46. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 63 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 63 | RECORD NUMBER | 1737 |
| SECTION 4/ 63 NOT IN DIRECTORY | | |
47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 64 (0): Directory (b)

- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 64 | |
| SECTION 4/ 64 NOT IN DIRECTORY | RECORD NUMBER 1748 |
48. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 65 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 65 | |
| SECTION 4/ 65 NOT IN DIRECTORY | RECORD NUMBER 1759 |
49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 4, MT= 91 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 4, MT= 91 | |
| SECTION 4/ 91 NOT IN DIRECTORY | RECORD NUMBER 1770 |
50. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 5, MT= 16 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 5, MT= 16 | |
| SECTION 5/ 16 NOT IN DIRECTORY | RECORD NUMBER 1782 |
51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 5, MT= 17 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 5, MT= 17 | |
| SECTION 5/ 17 NOT IN DIRECTORY | RECORD NUMBER 2000 |
52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 5, MT= 18 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 5, MT= 18 | |
| SECTION 5/ 18 NOT IN DIRECTORY | RECORD NUMBER 2112 |
53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 5, MT= 91 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 5, MT= 91 | |
| SECTION 5/ 91 NOT IN DIRECTORY | RECORD NUMBER 2121 |
54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 5, MT=455 (0): Directory (b)
- | | |
|---|--------------------|
| ERROR(S) FOUND IN MAT=9443, MF= 5, MT=455 | |
| SECTION 5/455 NOT IN DIRECTORY | RECORD NUMBER 2315 |
55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 8, MT= 16 (0): Directory (b)

- ERROR(S) FOUND IN MAT=9443, MF= 8, MT= 16
SECTION 8/ 16 NOT IN DIRECTORY RECORD NUMBER 2896
56. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 8, MT= 17 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF= 8, MT= 17
SECTION 8/ 17 NOT IN DIRECTORY RECORD NUMBER 2899
57. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF= 8, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF= 8, MT=102
SECTION 8/102 NOT IN DIRECTORY RECORD NUMBER 2902
58. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=12, MT= 18 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=12, MT= 18
SECTION 12/ 18 NOT IN DIRECTORY RECORD NUMBER 2906
59. Missing a gamma spectrum for continuum of gammas
MAT=9443, MF=12, MT= 18 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=9443, MF=12, MT= 18
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
60. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=12, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=12, MT=102
SECTION 12/102 NOT IN DIRECTORY RECORD NUMBER 2912
61. Missing a gamma spectrum for continuum of gammas
MAT=9443, MF=12, MT=102 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=9443, MF=12, MT=102
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
62. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=13, MT= 3 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=13, MT= 3
SECTION 13/ 3 NOT IN DIRECTORY RECORD NUMBER 2919
63. Missing a gamma spectrum for continuum of gammas
MAT=9443, MF=13, MT= 3 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=9443, MF=13, MT= 3
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

64. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=14, MT= 3 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=14, MT= 3
SECTION 14/ 3 NOT IN DIRECTORY RECORD NUMBER 2930
65. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=14, MT= 18 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=14, MT= 18
SECTION 14/ 18 NOT IN DIRECTORY RECORD NUMBER 2932
66. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=14, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=14, MT=102
SECTION 14/102 NOT IN DIRECTORY RECORD NUMBER 2934
67. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=15, MT= 3 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=15, MT= 3
SECTION 15/ 3 NOT IN DIRECTORY RECORD NUMBER 2937
68. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=15, MT= 18 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=15, MT= 18
SECTION 15/ 18 NOT IN DIRECTORY RECORD NUMBER 3351
69. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=15, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=15, MT=102
SECTION 15/102 NOT IN DIRECTORY RECORD NUMBER 3397
70. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=31, MT=456 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=31, MT=456
SECTION 31/456 NOT IN DIRECTORY RECORD NUMBER 3447
71. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=9443, MF=33, MT= 2 (0): Directory (b)
- ERROR(S) FOUND IN MAT=9443, MF=33, MT= 2
SECTION 33/ 2 NOT IN DIRECTORY RECORD NUMBER 3552

72. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=9443, MF=33, MT= 4 (0): Directory (b)

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ERROR(S) FOUND IN MAT=9443, MF=33, MT= 4
SECTION 33/ 4 NOT IN DIRECTORY          RECORD NUMBER    3656
```

73. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=9443, MF=33, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF=33, MT= 16
SECTION 33/ 16 NOT IN DIRECTORY          RECORD NUMBER    3676
```

74. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=9443, MF=33, MT= 18 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF=33, MT= 18
SECTION 33/ 18 NOT IN DIRECTORY          RECORD NUMBER    3682
```

75. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=9443, MF=33, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=9443, MF=33, MT=102
SECTION 33/102 NOT IN DIRECTORY          RECORD NUMBER    4161
```

• **psyche** Warnings:

1. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 1.13970E-04 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 1.13970E-04 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

```
FILE 2
SECTION 151
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 1.13970E-04
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 1.13970E-04
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
```

2. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 1.13658E-04 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

```
FILE 2
SECTION 151
ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 1.13658E-04
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
```

3. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 1.12719E-04 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 1.12719E-04
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

4. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 1.03156E-04 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 1.03156E-04
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

5. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 9.08141E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 9.08141E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

6. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 7.71005E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 7.71005E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

7. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 7.55879E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 7.55879E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

8. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 7.55779E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

FILE 2

SECTION 151

ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 7.55779E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00

9. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 7.75578E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 7.75578E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
10. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 7.95829E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 7.95829E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
11. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 8.28945E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 8.28945E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
12. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 8.64422E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 8.64422E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
13. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 9.05829E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 9.05829E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
14. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 9.88643E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 9.88643E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
15. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 9.87839E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 9.87839E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
16. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 9.75628E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 9.75628E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
17. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 9.89397E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 9.89397E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
18. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 9.83116E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 9.83116E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
19. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 9.40402E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 9.40402E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
20. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 9.34020E-05 / DENSITY 1.99000E+00 SHOULD BE 1.65000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 9.34020E-05
DENSITY 1.99000E+00 SHOULD BE 1.65000E+00
21. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / TOTAL OF 24 POINTS IN ERROR FOR THIS J-STATE (0): URR dens. (b)

- FILE 2
SECTION 151
TOTAL OF 24 POINTS IN ERROR FOR THIS J-STATE
TOTAL OF 24 POINTS IN ERROR FOR THIS J-STATE
TOTAL OF 24 POINTS IN ERROR FOR THIS J-STATE
... [1 more lines]
22. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53346E-04 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53346E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53346E-04
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53346E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
23. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52645E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52645E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
24. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50558E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50558E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
25. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29303E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29303E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
26. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01874E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01874E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
27. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71394E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71394E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
28. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68026E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68026E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
29. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68004E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68004E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
30. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72407E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72407E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
31. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76909E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76909E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
32. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84273E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84273E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
33. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92156E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92156E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
34. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01364E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01364E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
35. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19771E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19771E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
36. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19580E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19580E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
37. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16874E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16874E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
38. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19939E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19939E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
39. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18532E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18532E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
40. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09039E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09039E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
41. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07623E-04 / DENSITY 2.31000E+00 SHOULD BE 2.03400E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07623E-04
DENSITY 2.31000E+00 SHOULD BE 2.03400E+00
42. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
43. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52683E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52683E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
44. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50593E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50593E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
45. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29332E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29332E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
46. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01905E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01905E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
47. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71417E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71417E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
48. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68050E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68050E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
49. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68025E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68025E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
50. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72432E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72432E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
51. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76935E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76935E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
52. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84296E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84296E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
53. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92186E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92186E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
54. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01392E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01392E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
55. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19804E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19804E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
56. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19613E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19613E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
57. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16905E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16905E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
58. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19970E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19970E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
59. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18563E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18563E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
60. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09070E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09070E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
61. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07653E-04 / DENSITY 1.99000E+00 SHOULD BE 1.45286E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07653E-04
DENSITY 1.99000E+00 SHOULD BE 1.45286E+00
62. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04 / ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04
ENERGY = 3.00000E+02. STRENGTH FUNCTION IS 2.53382E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
63. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52683E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 3.50000E+02. STRENGTH FUNCTION IS 2.52683E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
64. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50593E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 4.50000E+02. STRENGTH FUNCTION IS 2.50593E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
65. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29332E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 5.50000E+02. STRENGTH FUNCTION IS 2.29332E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
66. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01905E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 6.00000E+02. STRENGTH FUNCTION IS 2.01905E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
67. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71417E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 6.50000E+02. STRENGTH FUNCTION IS 1.71417E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
68. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68050E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.00000E+02. STRENGTH FUNCTION IS 1.68050E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
69. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68025E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 7.50000E+02. STRENGTH FUNCTION IS 1.68025E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
70. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72432E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.00000E+02. STRENGTH FUNCTION IS 1.72432E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
71. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76935E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 8.50000E+02. STRENGTH FUNCTION IS 1.76935E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
72. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84296E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.00000E+02. STRENGTH FUNCTION IS 1.84296E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
73. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92186E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 9.50000E+02. STRENGTH FUNCTION IS 1.92186E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
74. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01392E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 1.00000E+03. STRENGTH FUNCTION IS 2.01392E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
75. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19804E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)

- FILE 2
SECTION 151
ENERGY = 1.50000E+03. STRENGTH FUNCTION IS 2.19804E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
76. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19613E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.00000E+03. STRENGTH FUNCTION IS 2.19613E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
77. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16905E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 2.50000E+03. STRENGTH FUNCTION IS 2.16905E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
78. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19970E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 3.50000E+03. STRENGTH FUNCTION IS 2.19970E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
79. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18563E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 5.50000E+03. STRENGTH FUNCTION IS 2.18563E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
80. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09070E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)
- FILE 2
SECTION 151
ENERGY = 7.50000E+03. STRENGTH FUNCTION IS 2.09070E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00
81. Level density in URR not in agreement with PSYCHE's expectations
FILE 2 / SECTION 151 / ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07653E-04 / DENSITY 1.99000E+00 SHOULD BE 1.13000E+00 (0): URR dens. (a)


```

FILE 2
SECTION 151
ENERGY = 9.50000E+03. STRENGTH FUNCTION IS 2.07653E-04
DENSITY 1.99000E+00 SHOULD BE 1.13000E+00

```

- recent Warnings:

1. L Dependent Scattering Radius in the Evaluation is Zero.
0: $AP(E)$ is 0

```

Calculate Cross Sections from Resonance Parameters (RECENT 2015-1)
=====
Retrieval Criteria----- MAT
File 2 Minimum Cross Section- 1.0000E-10 (Standard Option)
Reactions with No Background- Output (Resonance Contribution)
... [615 more lines]

```

- fudge-4.0 Warnings:

1. Missing a channel with a particular angular momenta combination
resonances / resolved / Reich_Moore (Error # 0): missingResonanceChannel

```

WARNING: Missing a channel with angular momenta combination L = 1, J = 2.0 and S = 2.0 for "competitive"
WARNING: Missing a channel with angular momenta combination L = 1, J = 2.0 and S = 3.0 for "competitive"
WARNING: Missing a channel with angular momenta combination L = 1, J = 3.0 and S = 2.0 for "competitive"
WARNING: Missing a channel with angular momenta combination L = 1, J = 3.0 and S = 3.0 for "competitive"
... plus 1 more instances of this message

```

2. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: nonelastic (Error # 0): CS Sum.

```

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.21%

```

3. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 2 ((z,n)): / Form 'eval': (Error # 0): Condition num.

```

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

```

4. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 3 (n[multiplicity:'2'] + Pu240): / Form 'eval': (Error # 0): Condition num.

```

WARNING: Ratio of smallest/largest eigenvalue (0.000000e+00) is too small

```

5. The ratio of smallest/largest eigenvalue is quite small, possibly leading to numerical instability in downstream codes.
Section 4 (n[multiplicity:'energyDependent', emissionMode:'prompt'] + n[emissionMode:'6 delayed'] + gamma [total fission]): / Form 'eval': (Error # 0): Condition num.

```

WARNING: Ratio of smallest/largest eigenvalue (3.854505e-09) is too small

```

- fudge-4.0 Errors:

1. Calculated and tabulated Q values disagree.
reaction label 17: n[multiplicity:'2'] + Pu240 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -12811980.59585571 eV vs -5248041. eV!

2. Calculated and tabulated Q values disagree.
reaction label 18: n[multiplicity:'3'] + Pu239 (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -19346180.08279419 eV vs -1.1701e7 eV!

3. Calculated and tabulated Q values disagree.
reaction label 20: Pu242 + gamma (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -1260741.373168945 eV vs 6300801. eV!

4. Energy range of data set does not match cross section range
*production label 21: /reactionSuite/reactions/production[@label='21'] / Product: gamma
/ Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (99990.01 -> 20000000.0) vs (1e-05 -> 20000000.0)

5. Energy range of data set does not match cross section range
*production label 21: /reactionSuite/reactions/production[@label='21'] / Product: gamma
/ uncorrelated - energy - XYs2d: (Error # 0): Domain mismatch (a)*

WARNING: Domain doesn't match the cross section domain: (99990.01 -> 20000000.0) vs (1e-05 -> 20000000.0)

- njoy2012 Warnings:

1. There is a problem with the fission energy release.
heatr...prompt kerma (0): HEATR/nheat (3)

```
---message from nheat---changed q from    2.019801E+08 to    1.890001E+08
                             for mt   18
```

2. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouppr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 16
                             only mf4/mf5 provided
```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouppr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 17
                             only mf4/mf5 provided
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouppr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 91
                           only mf4/mf5 provided
```

- njoy2012 Errors:

1. NJOY2012 I/O bug in util.f90
errorr...produce cross section covariances (0): NJOY Bug

```
---message from stderr
At line 196 of file util.f90 (unit = 18, file = '../tmp/n-094_Pu_241/njoy2012/gfortrantmpsIc2zf')
```